

V-Twin Mfg.
Fork Spring Lowering Kit
For use on 1997- 2001 & 2006 – 2010
VT Part No. 24-1563

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

Warning: Once the chassis and/or suspension on the motorcycle are changed, the handling characteristics of the motorcycle will be different. Proceed with caution when operating the motorcycle after this modification until you are accustomed to the new handling characteristics.

In order to prevent your motorcycle from dropping or tipping when the forks are removed, it is advised that it be securely blocked. Failing to do so can cause serious injury and/or damage.

Note: This kit was designed to lower a standard FLH/FLT fork either 1" inch or 2" inches. Certain models such as an FLHX have a 1" inch shorter fork from the factory. For these instances, the installation of the 1" inch configuration would maintain the original height, and the 2" inch configuration would lower the fork only 1" inch from its original length.

Installation Advisory

- Read all the instructions prior to installing this kit on your motorcycle, and refer to your factory authorized manual as a reference.
- Since the balance point is toward the front of the engine, be sure to support and lift the motorcycle in a secure manner so that the front wheel is off the ground.
- Refer to instructions contained in your factory authorized shop manual before removing forks. It is highly recommended that the forks be disassembled, cleaned, and inspected for maximum performance.
- During installation of the Fork Spring Lowering Kit only 5 oz. of 10wt. fork oil is needed in each fork for lubricating the internal moving parts. The cartridge dampers are sealed. It is not recommended to change the volume or viscosity of the oil. Doing so could cause damage and/or loss of control.

Caution: Although the installation of this kit will not change the compressed length of the front forks, it has been found that some bikes may not possess adequate clearance between the fender, fairing and/or accessories. Therefore, it is recommended when the fork springs are removed from both forks, re-install the forks, fender, wheel and anything else removed, and lift the front forks, or lower the bike to completely compress the front forks. Once the forks are fully compressed, check for adequate clearance between the tire, fender, fairing, crash bar, and accessories. Clearance issues must be corrected prior to installing this kit in order to avoid damage or control problems.

Installation Instructions

1. After removing both forks, start with one of the forks and drain the fork oil. Then remove the bolt from the bottom of the fork. Compressing the fork will increase the pressure on the damper rod, and aid in preventing it from turning while removing the screw.
2. Remove the fork cap then remove the fork spring.

Warning: Since the fork cap is under spring pressure, extreme care must be taken as it is removed in order to avoid injury. Maintain downward pressure on the cap while you unscrew the final threads in order to minimize the spring jump which will occur as soon as the cap is fully un-threaded.

3. Remove the damper rod, top-out spring, and the lower slider from the inner fork tube according to instructions contained in your factory authorized shop manual.
4. Lowering 1 inch or 2 inches requires mechanical assistance to compress the Fork Spring Lowering Kit assembly. If the fork is to be lowered 1 inch, one of the long top-out springs should be installed on each Fork Spring Lowering Kit assembly as shown (figure 1), as well as three of the supplied "C" shaped pre load spacers between the top of the fork spring and the upper spring seat (see figure 2).

5. If the fork is to be lowered 2 inches, one long top-out spring and one short top-out spring should be installed on each Fork Spring Lowering Kit assembly as shown (see figure 1). No pre load spacers need to be installed.
6. Once the proper combination of top-out springs and spacers are installed onto the Fork Spring Lowering Kit assembly, it can be inserted into the fork tube.
7. Install the bottoming cup on the Fork Spring Lowering Kit assembly.
8. Install the lower slider onto the inner fork tube according to instructions contained in your factory authorized shop manual.
9. Place a drop of red thread locking agent onto the bolt that came out of the bottom of the fork. Then install it by tightening it up into the Fork Spring Lowering Kit. The bolt must be torqued to the factory recommended specification of 11-18 ft. lbs.
10. This process must be repeated on the other fork before proceeding to "Both Forks" section of the instructions.

Both Forks including stock damper-rod type & cartridge type:

1. Support the fork assemblies and fill each with 5 oz. of 10wt. fork oil. Stroking the assemblies will help draw the oil from the inner fork tube to the outer fork slider.
2. Extend the fork assembly completely and install the supplied fork cap. Torque the cap to 50 -60 ft-lbs as recommended in your factory manual.
3. Install the forks and other components as outlined in your factory manual.
4. Quarter inch spacers can be removed to soften the ride and lower the height, or added to stiffen the ride and increase the height.



Figure 1



Figure 2